

COLORADO BUSINESS REVIEW

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Forum Keynote Address

Modest Beginnings Lead to Major Transformations

Anna Sernka

Scott Green, Engineering Site Director at Google Boulder, summarized the development of the technology industry in the Front Range and its impacts in a rapidly changing world as the keynote speaker at the 54th annual Colorado Business Economic Outlook Forum. The Colorado industry's maturation through decades of innovation, startups, and acquisitions has revolutionized technology and exemplifies the benefits of a culture of collaboration.

Green moved to Boulder in 1998 to join E-Mail Publishing, a startup that later

became MessageMedia and eventually was acquired by DoubleClick. In 2003, Green joined SketchUp. Despite a very small team and doubts from industry leaders, SketchUp eventually became the world's most-used 3D software program.

SketchUp soon began collaborations with Keyhole to develop a product called Earth Viewer, which contributed to the launch of Google Earth. Google acquired SketchUp in 2006.

Growth in the technology industry, whether it occurred organically or through acquisitions, was a complex

process best represented by an interconnected web with industry leaders often transitioning from one firm to the next. It is challenging to keep up with the seemingly constant stream of acquisitions, but this contributes to the success of the industry. As technologies and software are exposed to more experts and business leaders, the more they can be improved and built upon for complementary uses.

In addition, the technology industry in the Front Range is defined by many common investors and a high degree of collaboration. Unlike some industries characterized by pure competition or secrecy, Green noted how "entrepreneurs and investors help each other. Local communities work together."

As the engineering site director at Google, Green witnessed the modest beginnings of many projects. Google Drive, for example, started as a browser-based document editor, but gradually transitioned into an online sharing and collaboration platform. Google also excels in making the world more connected. In Japan, for example, people can use

Scott Green, engineering site director at Google Boulder.



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FROM THE EDITOR

As highlighted at the 54th annual Colorado Business Economic Outlook Forum, Colorado's employment growth is expected to slow in 2019 compared to 2018, although the state will still be in the top 10 states. The three industries projected to add the most jobs are Professional and Business Services; Trade, Transportation, and Utilities; and Leisure and Hospitality.

The half-day event, held on December 10, featured an employment forecast for 13 industry sectors and a keynote address by Scott Green, engineering site director, Google Boulder. Three industry breakout sessions rounded out the afternoon.

Summaries of the day's proceedings are featured in this issue. For additional details, visit colorado.edu/business/brd.

Please contact me directly at 303-492-1147 with any comments or questions.

—Richard Wobbekind

Summary of Forecast Colorado Economy Will Continue to Outperform



Richard Wobbekind, Executive Director, Business Research Division and Kelly Brough, President and CEO, Denver Metro Chamber of Commerce.

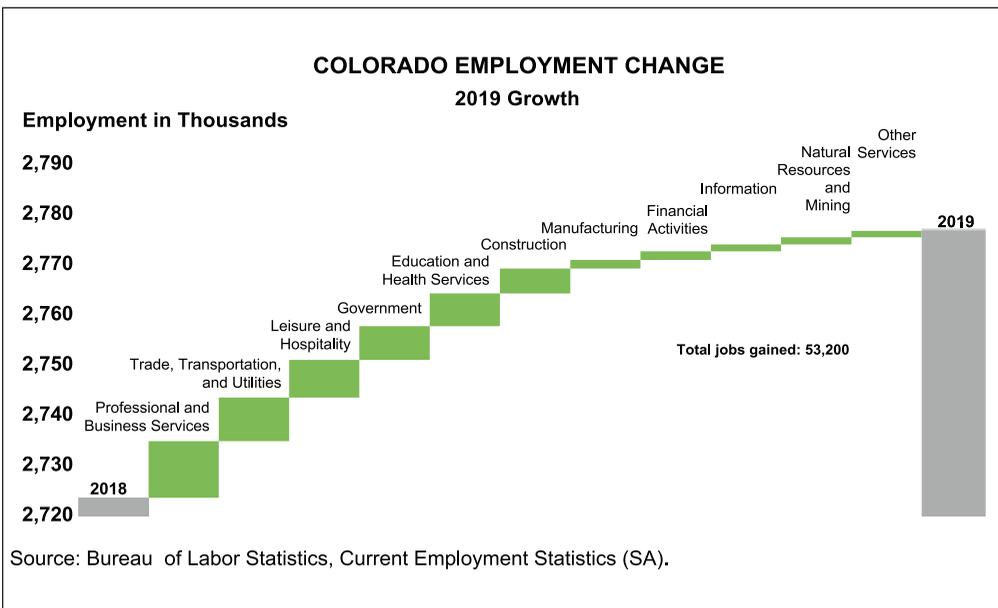
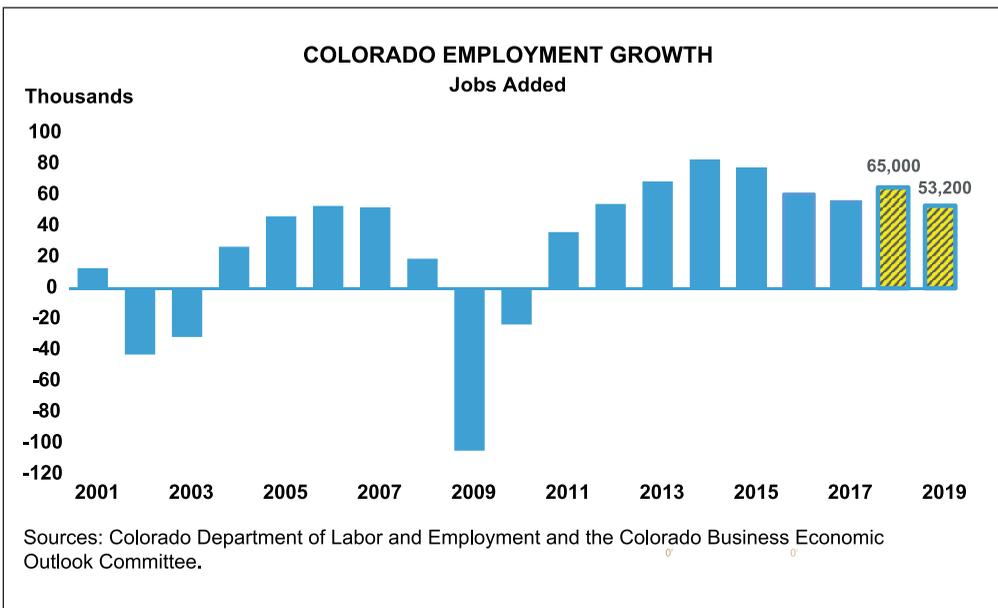
The following observations summarize the thoughts of the Colorado Business Economic Outlook committee members as of early December for 2019.

Employment growth in 2018 is projected to close up 2.4%, or 65,000 jobs, reflecting an acceleration in growth that can be attributable to tax cuts, labor force entrants, and other factors. Colorado will continue to add jobs in 2019, extending employment gains to a ninth-consecutive year. Job growth will occur at a slower pace than in 2018 and the slowest pace since 2011. Constrained by slower industry growth and a shortage of workers, Colorado will add 53,200 workers in 2019, or growth of 2%.

In 2019, the three private-sector industries projected to add the most jobs are Professional and Business Services; Trade, Transportation, and Utilities; and Leisure and Hospitality. The greatest pace of growth will be in Natural Resources and Mining; Construction; and Professional and Business Services.

Agriculture—The Agriculture Sector will post lower net income for the third-consecutive year in 2018 to the lowest level since 2002 before ticking up slightly in 2019. The industry has been under pressure due to low commodity prices, rising costs, and sinking trade relations resulting in tariffs on agricultural exports and imports of ag inputs.

Natural Resources and Mining—The value of Colorado oil production increased 62%, to \$9.9 billion, in 2018 on higher production and higher prices, but the value will drop in 2019 on softer pricing. Overall, the value of Colorado's natural resources is projected to increase 1.7% in 2019 to over \$18 billion. Industry employment is expected to post an increase of 4.8% in 2019. Compared to the rest of the nation, Colorado ranks 7th in petroleum liquids, 6th in wet natural gas, 13th in coal production, 3rd in gold production, and 2nd in molybdenum production. Colorado is also a leading producer of renewable energy, including



comparative advantages in Computer and Electronic Products, Food and Beverage and Tobacco Products, Miscellaneous Manufacturing, Chemical Products, and Fabricated Metal Products.

Trade, Transportation, and Utilities—TTU employment is anticipated to increase by 1.8% to total 479,200 jobs in 2019, with trade (retail and wholesale) contributing the majority of industry growth. Retail sales point to continued growth of 5.3% in 2019. Denver International Airport, which reached new passenger records in 2018, began a three-year renovation project that will help it remain a key economic driver in the state. Overall, TTU is expected to add 8,700 jobs in 2019.

Information—The industry posted strong gains in 2018 on a rebounding Telecom Sector, as well as growth in Publishing, Motion Picture and Sound Recording, Data Processing, and Broadcasting. The industry is expected to grow by 1,400 jobs in 2019.

Financial Activities—The Financial Activities Sector is expected to continue to grow in Colorado in 2019, adding 1,700 jobs to reach total employment of 171,700. Rising interest rates post risks for some financial sectors (i.e., mortgage lending, residential real estate), but softening regulation will provide community banks some relief. Commercial real estate remains healthy, and residential real estate will continue to appreciate, but at a slower pace.

Professional and Business Services—The Professional and Business Services (PBS) Sector primarily provides services to other businesses (i.e., business-to-business). The sector is projected to post employment growth of 3.2% in 2018 and 2.7% in 2019, fueled by Colorado’s skilled workforce, and driven by population and business growth, notably in tech.

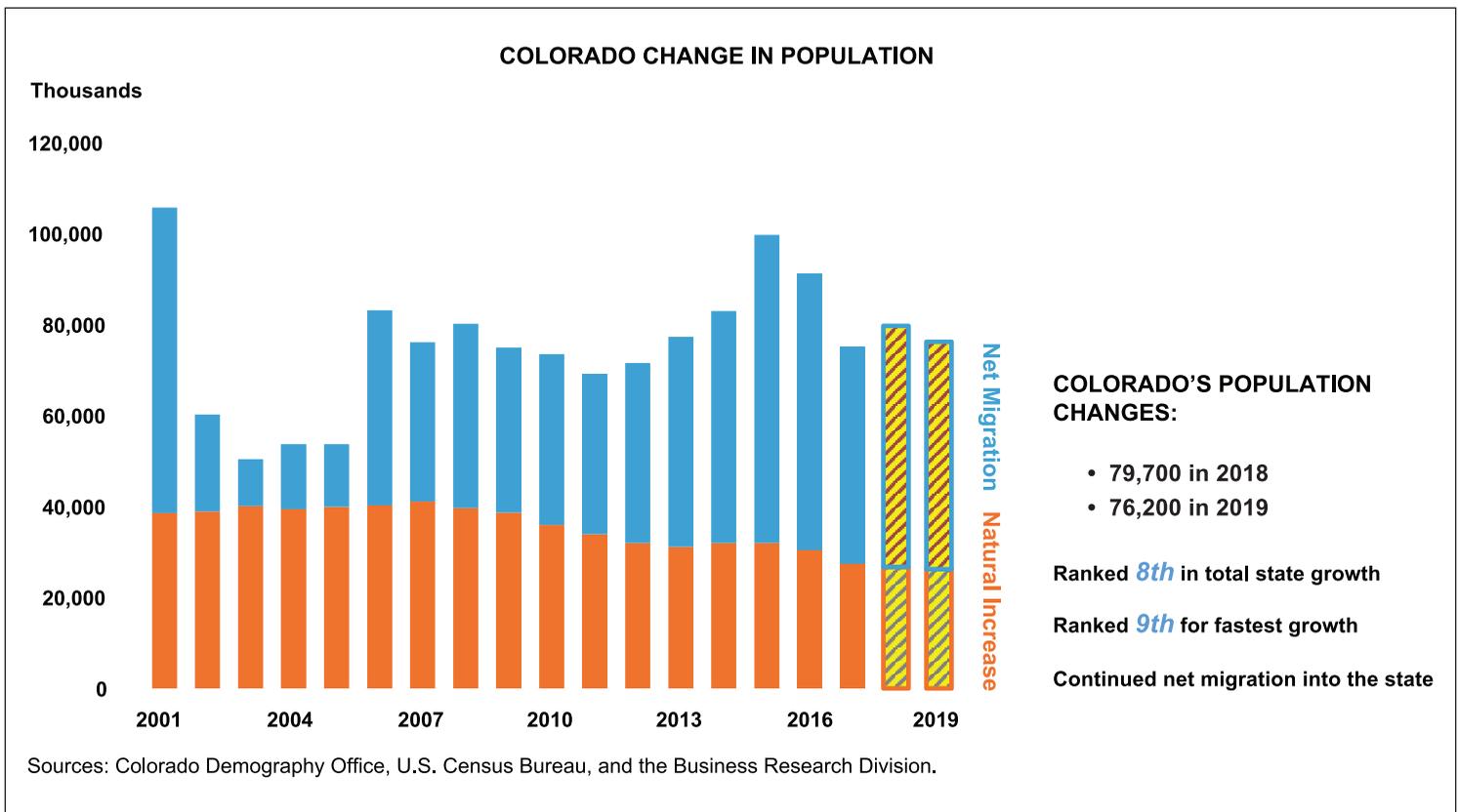
Education and Health Services—The majority of sector employment is made up of health

wind, solar, biomass, and hydroelectric energy sources.

Construction—The demand for housing units will remain in 2019 with continued strong in-migration totaling about 50,000. However, the supply of new homes will slow, with new single-family permits increasing 4.9% and new multifamily construction falling 7.1%. The value of residential construction is projected to climb to \$11.5 billion in 2019. Summing residential with strong nonresidential values and major nonbuilding (infrastructure) projects will bring the total value of construction to

a record \$21.6 billion in 2019. Labor constraints and interest rates will weigh on the industry. Employment will increase 2.9% in 2019, or 5,000 jobs, to total 176,800.

Manufacturing—While Colorado is not a manufacturing-intensive state, industry growth has made Colorado a leader, ranking 7th for real GDP growth and 22nd for industry employment growth in 2017. Employment growth is projected to increase 1,700 jobs, or 1.2%, in 2019, with gains mostly in nondurable goods. The industry’s strength in Colorado derives from the mix of subsectors, with



care professionals, representing 88% of industry employment. Increased access to health insurance and a growing, aging population will continue to lead to more health care jobs in the state. Private education and health care services are expected to continue their trend of modest growth, adding 6,700 and 6,500 jobs in 2018 and 2019, respectively.

Leisure and Hospitality—Tourism-related employment is expected to grow for the 10th consecutive year in 2019 with a broad suite of tourism assets and aggressive marketing from the Colorado Tourism Office and the state's various destination marketing organizations. The state and the Denver Metro region continue to post records, and Colorado's ski industry maintains the greatest U.S. market share for snow sports visits. Momentum in Colorado's tourism industry is anticipated to continue through 2018 and 2019, with forecasted employment increases of 7,100 jobs and 7,500 jobs, respectively.

Government—Government employment within Colorado is expected to increase 1.5% in 2019, with gains in

state and local government offsetting losses in federal government. Growth is in response to population and school enrollment growth, as well as in gains in state and local government revenue.

International Trade—Colorado exports grew nearly 7% in 2018 year-to-date through September, but export growth is lagging the nation. Looking ahead to 2019, trade agreement negotiations, tariffs, and the strong dollar all pose risks to Colorado exports.

National and International

- U.S. output will grow at a slower pace in 2019, with real GDP growth at 2.7% in 2019 compared to an estimated 2.9% in 2018.

- Personal consumption expenditures will remain high with continued employment and wage growth and elevated consumer confidence.

- The Fed will continue with rate increases in 2019; inflation will remain at or above the Fed target rate.

- Interest rates, trade policy (i.e., tariffs), and the tight labor market pose risks to growth.

Colorado

- Despite slower growth, Colorado will still be in the top 10 states in 2019 for employment growth; wages will increase above the national average.

- Employment growth is projected in each of the 11 industries in both 2018 and 2019.

- Commodity prices will weigh on commodity-sensitive industries, including agriculture and energy.

- Population growth will slow modestly in 2019. The state will still add an estimated 76,200 people, with 50,000 coming from net in-migration according to the State Demography Office.

Colorado's skilled, educated workforce is credited with fueling industry growth among the state's tech sectors. Colorado retains a competitive advantage for attracting, recruiting, and retaining people and businesses, placing the state in the top 10 for economic growth nationally. 

For more information on each industry sector, visit colorado.edu/business/brd.

Forum Breakout Session

Colorado's Real Estate Market: A Gentle Curve in the Road to the Peak—We Are Not There Yet

Cindy DiPersio

Opinions expressed by panelists reflect the most current market information available as of early December.

Real estate in its various forms is a major driver of the Colorado, national, and global economies. In this outlook breakout session, organized and moderated by **Michael Kercheval**, Executive Director of the CU Real Estate Center, experts examined industry sectors in detail. The question many people are asking is whether there is a real estate bubble. The industry has had many good years. Can this go on? Some believe this bubble is going to burst. As the panelists discussed, the fundamentals indicate this is not the case. However, if we are not there yet, how close are we to the peak?

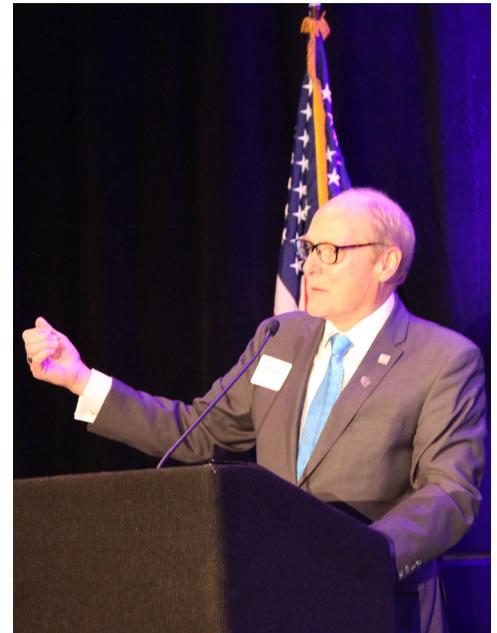
According to **Pamela Kelly**, Senior General Manager of Park Meadows Retail Resort, the outlook for Colorado's retail sector is very promising. Through the first six months of 2018, the Denver Metro area vacancy rate was below 5%, while sales grew over 5%. A good indication of how well the retail industry is doing in Colorado is the opening of Denver Premium Outlets in Thornton in September. Global retailers are also expanding into the state, including Zara.

More than one million square feet of retail was built in the seven-county Front Range in 2018. While big-box stores such as Sports Authority and Toys "R" Us have closed, most spaces are being repurposed, which is diversifying the area. Emerging key trends in retail include Internet-based businesses expanding to brick-and-mortar stores. For example, Soft Surroundings, Sundance, Altar'd State, and Amazon 4-star have opened

stores in Park Meadows.

Another trend is technology-driven retail. Among tech companies with a retail presence are Tesla, Microsoft, Apple, and Peloton. With the growth in housing, there has been a surge in stores focusing on home accessories, fashions, and appliances. Other trends include destination health care and services, fitness and recreation, experiential entertainment (think escape rooms), and dining.

Regarding the residential asset class, the number of permits pulled is not keeping pace with Colorado's, and specifically Denver's, population and job growth, which has led to a housing undersupply. Lennar Multifamily Communities Division President **Scott Johnson** presented data that show the cumulative undersupply since 2005, based on job growth, is 36,666 homes. Looking at the percentage of permits pulled in each metropolitan statistical area (MSA) based on total Colorado permits, as of 2017, the Denver MSA is responsible for 56% compared to 45% in 2005. The allocation of permits is shifting to single family, and the lack of inventory has led to a sellers' market. Days on market is down to 25. From 2010 to 2018, home appreciation was up 93%, and rents climbed 72%. Denver has experienced a 42% increase in construction costs since 2009. With promising population and job growth, the area is a desirable lifestyle destination. However, affordability is a constraint for homebuyers and renters. Looking

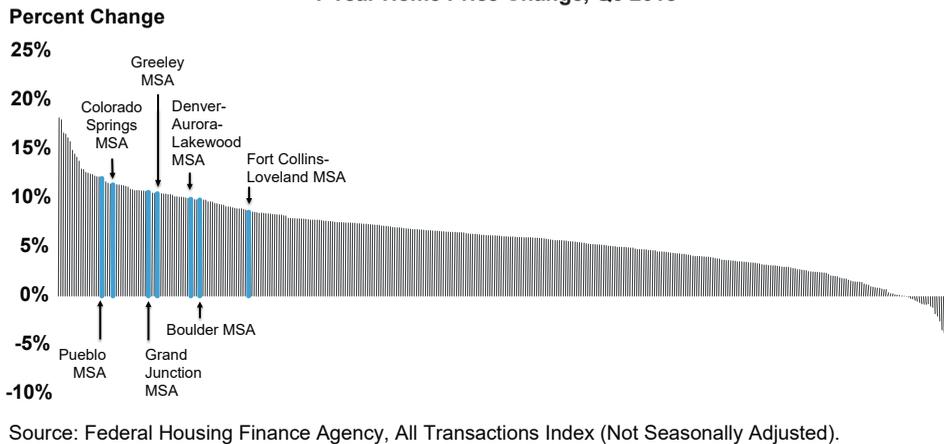


Michael Kercheval, Executive Director of the CU Real Estate Center, moderated the session.

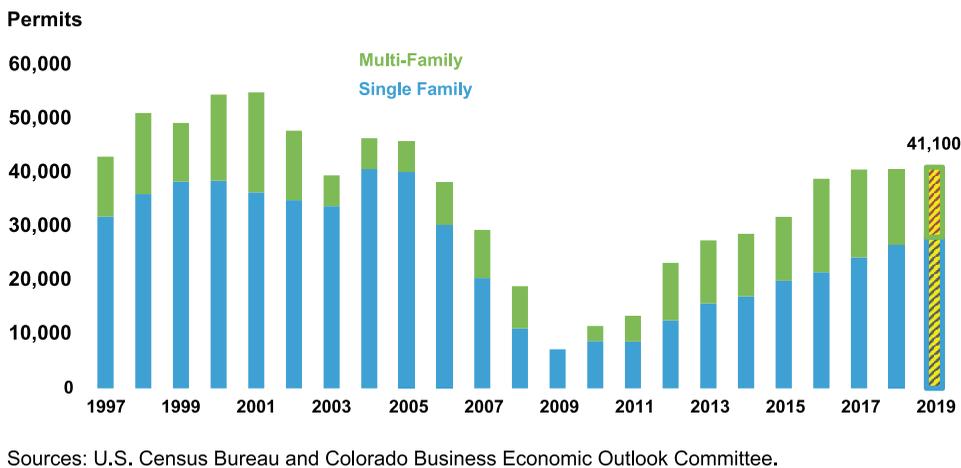
forward, the use of prefabricated modular bathrooms and kitchens in apartments will lower the cost of construction, and technology may lead to new amenities such as automated package service systems and drone deliveries.

Cyndi Thomas, Partner and Executive Vice President Etkin Johnson Real Estate Partners, discussed industrial and flex space. Nationally, the vacancy rate in third quarter 2018 was 4.4% in the industrial market compared to 6.1% in Colorado, but rents are higher in the state. Year-to-date completion in Denver is 2.1 million square feet, but even more astonishing is 4.7 million square feet is in the pipeline. Absorption has been 1.7 million square feet so far in 2018. Last quarter was the 34th consecutive quarter of positive net absorption of industrial properties in Denver Metro. Year-to-date sales volume totaled \$1.3 billion, which is a gain of 68% year-over-year due

FHFA HOME PRICE INDEX BY MSA 1-Year Home Price Change, Q3 2018



RESIDENTIAL BUILDING PERMITS



largely to two major sales. New retail is fueling much of the industrial demand, particularly e-commerce with its inventory, storage, and distribution requirements. Cyber Monday recorded \$8 billion in sales, which was an 18% year-over-year increase. Denver led the charge, with the highest per person sales volume, beating San Francisco, New York, and other large metro areas. Some in the industry believe a paradigm shift is occurring. Industrial net absorption tracks fairly regularly with GDP growth. However, absorption deviated from GDP the past three years,

with a huge spike in net absorption. Etkin Johnson believes this is due in large part to the shift to e-commerce and the third-party logistics firms that provide distribution, fulfillment, and services to retailers, manufacturers, and wholesalers.

Studies project that 60% of robotic sales in 2019 will support logistics operations. A large amount of industry growth is occurring in “last-mile” or “last-touch” facilities, which are smaller nodes that distribute goods to the end user. Etkin Johnson tenants range from manufacturing (Sierra Nevada) and

distributions centers (Fenix Outdoor) to last-touch (FedEx) facilities. Despite the growth in the industrial segment, the firm is increasingly mindful about offering amenities in its properties, including easy access to the outdoors for employees. Threats to the sector include rising construction costs and lack of skilled labor.

Jay Despard is city leader and senior managing director with Hines. The company, which is the largest private real estate development company in the world, developed Denver’s iconic “cash register” building. The average age of an office building in downtown Denver is 33 years. Hines recently developed an office building in downtown, 1144 Fifteenth Street, with 10-foot floor-to-ceiling windows. The standard in Denver is 8½ feet. With all the light coming in from outside, the space feels very modern and bright.

Systems have changed how people use and operate in office buildings, and office design reflects that change. How companies approach their employees has also changed, with recruiting and retention increasingly important. Firms are using office space for recruiting. Denver as a whole is changing, with millennials overtaking the baby boomers in the labor force, with 36% of the jobs. Millennials are now influencing decisions. Hines is planning to build a T3 — timber, technology, and transit — office building in RiNo that will feature 13-foot floor-to-ceiling glass on every floor, and every floor will have access to terraces. Allowing employees easy access to the outdoor environment is an important trend, especially for millennials.

The mix of industries in Denver’s central business district has changed from 50% energy companies in the mid-1980s to a diverse mix today. This will enable the area to fare better in an economic downturn. Since 2000, the downtown population has tripled to approximately 80,000 residents, and nearly 40% of the people who commute into downtown use mass transit. The population growth in Denver and the state bodes well for future growth of office space.



Real estate session panelists Pamela Kelly, Park Meadows; Scott Johnson, Lennar Multifamily Communities; Cyndi Thomas, Etkin Johnson Real Estate Partners; Jay Despard, Hines; and Chris Frampton, East West Partners.

Chris Frampton is senior managing partner of East West Partners. The firm is a recognized leader in the resort and hospitality sectors in South Carolina, Utah, Hawaii, and Colorado. The company has three rules about where it will develop. Rule one: it will only develop in a place the senior partner wants to move because real estate is local. The second rule is the place must be beautiful because the best places hold up in value over time. Rule three is that it is important that money is being spent to make the place better (e.g., improving infrastructure).

East West was started in 1986 in Beaver Creek, where Vail was spending a great deal of money, creating one of the world's best ski resorts at Beaver Creek. Spending continues to this day. The Epic Ski Pass has been around about

10 years. Vail Resorts is an incredibly successful company and was without peer until the Ikon Pass was launched in 2017 by a 13-resort company, Alterra Mountain Company. Alterra is challenging Vail's dominance. With approximately 52 million U.S. skiers every year, these two companies are spending a lot of money competing for those skiers. Vail and Alterra are investing in their resorts to improve the skier experience. Ski passes are influencing the number of people on the slopes—there are now more locals on the slopes than 15–20 years ago. In addition, people are coming more often and more regularly, but are making shorter trips. East West Partners is adapting to these changes. Among them, condos may have two master bedrooms as two families will buy a unit and may use it at the same time or different times.

Desired price points are also lower, which means moving the location away from the traditional base area. Frampton highlighted the company's developments in Avon, Snowmass Village, and Deer Valley in Utah. 

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Forum Breakout Session

The Changing Face of Retail in the Denver Metro Region

Brian Lewandowski

Opinions expressed by panelists reflect the most current market information available as of early December.

Retail has been described as an industry under fire, with legacy retailers downsizing or facing bankruptcy (e.g., Sears, Toys“R”Us, Sports Authority), and other retailers struggling to compete with e-commerce and mega-retailers. National retail sales grew 5.3% year-over-year in September, lifted slightly by double-digit growth in e-commerce (retail minus e-commerce grew 4.4%). The industry modestly added jobs and establishments, up 52,700 jobs year-to-date through November (+0.3%) and 1,345 establishments (+0.1%) in Q2. E-commerce still represents a minority of sales (9.8% as of Q3 2018 compared to 3.6% in Q3 2008), but e-commerce posted 14.5% growth year-over-year.

Colorado’s retail sector has been outperforming the nation. Colorado

ranked 4th in the pace of retail job growth in November (2.5%), while 15 states lost retail jobs year-over-year. The growth in establishments for the four quarters ending in Q2 ranked the state 22nd nationally, with 0.1% growth—the state netted just 18 new establishments year-over-year (26 states lost establishments). Colorado’s large firms are not experiencing growth fatigue—establishments with 20-100 employees and 100+ employees grew year-over-year. It is the small firms, those with fewer than 20 employees, which contracted in 2018. Colorado sales tax collections, a proxy for retail sales, were up 6.3% in October.

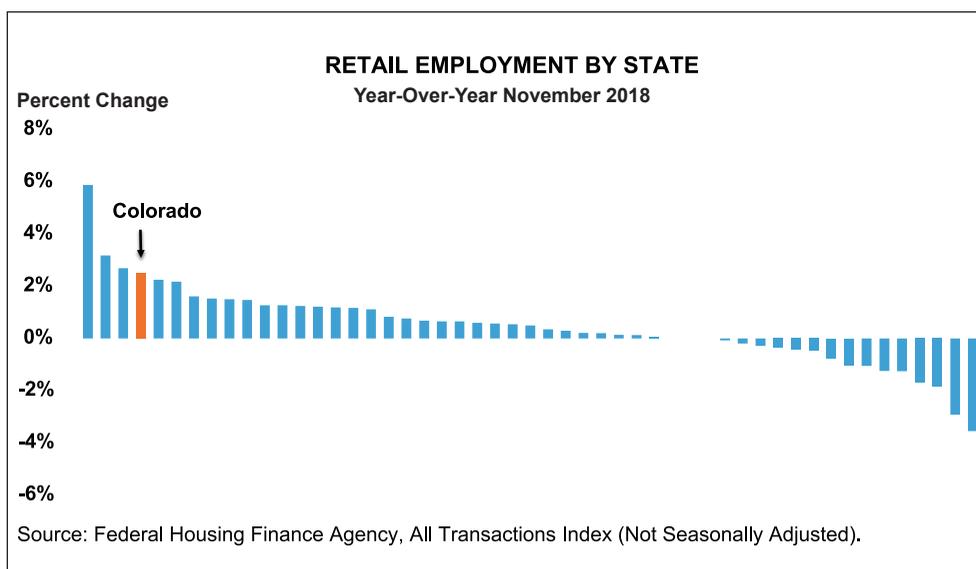
What attributes lend to the stronger growth in Colorado? The strong economy, growing population, and higher incomes all play a role in retail’s local success. A panel of industry leaders representing Thornton, Boulder, and Cherry Creek shared their insights during

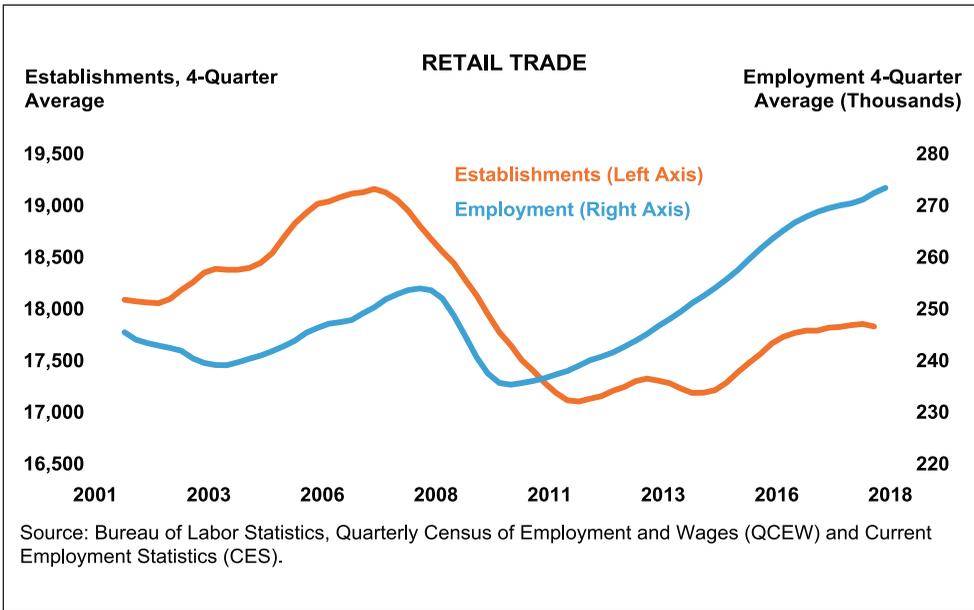
a retail breakout session at the Colorado Business Economic Outlook Forum.

Nick LeMasters, the General Manager of Cherry Creek Shopping Center, opined that, “As consumers, we have never had as many choices as we have today, whether it is an online choice or a brick and mortar choice, they really are almost infinite.” With Cherry Creek predominately luxury retail, LeMasters described three cultivation strategies: the luxury retail brand, the native internet play seeking a store front, and the first-to-market brands.

Julie Jacoby, the Economic Development Retail Administrator for the City of Thornton, oversees the retail business attraction process. Jacoby credited the regional growth and wealth for fueling the retail boom in the north metro region. “It has everything to do with what’s been occurring from a residential standpoint in the north I-25 corridor,” said Jacoby, describing growth in population and household income. According to Jacoby, median household income is \$61,000 nationally and \$76,000 for the city of Thornton. It is even higher (\$120,000) north of 120th Avenue. This helped support the addition of the 350,000 feet of retail at Denver Premium Outlets in Thornton.

Sean Maher, the CEO of the Downtown Boulder Partnership, oversees marketing, operations, events, and recruitment for the 49-square-block downtown district. Maher sees the future of retail “belongs to retailers who can create a great experience, who can give you outstanding service, who find a niche or a specialty.” He related this to downtown Boulder’s active lifestyle





workers. As well, these markets tend to be expensive residential markets, making worker commutes and transportation a challenge. However, a college community like Boulder lends a plentiful supply of college students to fill entry-level jobs while they are in school. Jacoby acknowledged that in Thornton, some retailers have lowered their company age policy in order to seek help from high-school students.

As well, the high cost of real estate, and thus leases, are a challenge to retailers. In Boulder, Maher described smaller footprints for retailers, effectively reducing the square footage for retailers, but also decreasing the price. This has helped keep Downtown Boulder retail 80% local. LeMasters added that driving great sales helps retailers overcome the high costs of real estate and labor in the region.

Looking ahead, the panel expressed optimism about the future of retail. For Maher, successful retail in the future provides great experiences and high service and is very niche and very specialty. LeMasters said, “brick and mortar is alive and well; it is certainly alive and well in Cherry Creek . . . We are in the golden age of retail.” Contrasting Thornton to Cherry Creek and Boulder, Jacoby added that Thornton has water rights and 1,400 acres of developable land along I-25. 

Brian Lewandowski is the Associate Director of the BRD. He may be contacted at brian.lewandowski@colorado.edu.

cluster, which includes running stores that fit shoes based on individuals’ gait, to bike stores that double as a brewpub.

All three panelists boasted high occupancy and outperforming stores in their areas, with a Cabela’s store in Thornton and a Patagonia store on the Pearl Street Mall in Boulder touting the highest per-square-foot sales among the respective retailers.

Experience has been critical for retail growth and flourishing. Jacoby described the connection of food, lodging, and entertainment in the city, as well as the extensive play structure at Premium Outlets to draw in families.

Maier described play amenities on each block of the Pearl Street Mall and 105 restaurants in Downtown Boulder. LeMasters impressed the importance of the visitor to Colorado, partially seeking the shopping experience in Cherry Creek.

The current tight labor market is a challenge for retailers in these three markets. In Thornton, Amazon and Simon Properties hired about 3,300 workers in the same month, exacerbating the worker shortage. The talent shortage in the region has led to wage growth, with all three panelists describing an implicit \$15 per hour price floor for retail

Forum Breakout Session

The Outdoor Rec Industry—A Driver of Colorado’s Economy

Anna Sernka

Opinions expressed by panelists reflect the most current market information available as of early December.

Colorado’s vast wilderness and availability of outdoor activities is a major source of attraction. While the terrain and natural features of Colorado that serve as the backdrop for this industry extend far into the past, the outdoor recreation industry’s breakthrough is relatively recent. Until 20 years ago, river guides were classified as “carnival workers” in the North American Industry Classification System (NAICS). The infrastructure, momentum, and ability to

generate positive outdoor experiences were well established, but now this industry is gaining recognition for its accomplishments and influence in the Colorado economy. The industry’s economic contribution is now being tracked and reported in federal statistics, by state agencies, and by nonprofit organizations.

Moderated by **Tony Gurzick**, Creative Services and Marketing Section Manager with Colorado Parks and Wildlife, the panel discussion demonstrated the “tight web of different parts of Colorado’s economy that come together within outdoor recreation.” Perhaps more than

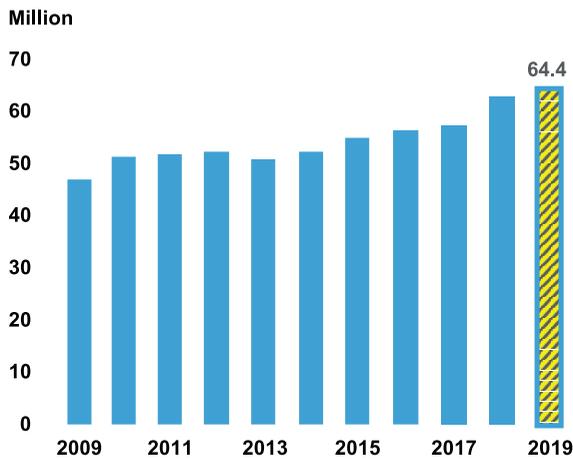
any other industry in Colorado, outdoor recreation is interrelated with many sectors of the economy.

Jody Kennedy, Public Involvement Specialist at Colorado Parks and Wildlife, first touched on the economic contributions of this industry. To show outdoor recreation is more than just leisure, her team surveyed 7,000 Colorado residents in the *Statewide Comprehensive Outdoor Recreation Plan (SCORP)*. In 2017, 92% of Coloradans recreated while 330,000 jobs in the state were *directly* related to outdoor recreation. The total economic



Attendees at the 54th annual Colorado Business Economic Outlook Forum held December 10, 2018.

COLORADO PUBLIC LANDS VISITS



Sources: National Park Service and Colorado Business Economic Outlook Committee. Photo courtesy of Colorado State Parks.

in 2017, which is more than twice the national average. Although record numbers of visitors provide plentiful economic opportunities, Ritter reports “residents would feel more positively about Colorado tourism if visitors were educated about how to respect the state’s natural resources.” In addition to emphasizing environmental stewardship, Colorado’s tourism economy gains a competitive edge with a focus on driving traveler spending, not just the number of individuals. Colorado stands out from other destinations through its development of sustainable traveler experiences. By educating travelers, it is possible to preserve and convey the value of Colorado’s natural resources.

With 12 years as CEO of Icelantic Skis, **Annelise Loevlie** shared the human aspect of outdoor recreation. As the largest USA-made ski company, Icelantic owes its success to employees who “love what they do.” With paid time off to ski or snowboard and higher wages, employees take pride in the factory. When employers care about the well-being of employees, especially in terms of spending time outside, Loevlie believes doors to engagement and collaboration open. In addition, the characteristics of Colorado’s economy and workforce are “fertile soil for makers, creators, entrepreneurs, and small businesses,” says Loevlie.

Andy Neinas, Principal at Echo Canyon River Expeditions, concluded the panel presentations with an overview of the past, present, and future state of outdoor recreation. According to Neinas, the transition to a modern outdoor recreation industry was marked by the identification, categorization, and measurement of its impact. Although outdoor recreation is finally being recognized for its economic contribution, it is still crucial to understand how this industry became an “overnight success.” In terms of the future, the challenge lies in quantifying the value of resources and their economic benefit. It may be easy to measure the number of visitors to Rocky Mountain National Park, but the difficulty lies in appraising the economic value of

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2017 COLORADO OUTDOOR RECREATIONAL ECONOMY PARTICIPATION



Source: Colorado Parks and Wildlife.

contribution of indirect and induced benefits extends even further to 511,000 jobs, \$21 billion in wages and salaries, \$37 billion in consumer spending, and \$9 billion in taxes. Not only is this sector growing faster than the national average GDP, but it is creating jobs beyond the Denver Metro area to support rural communities. Kennedy believes that the protection of natural resources,

partnerships between public and private organizations, and employer incentives are key to the long-term success of the outdoor recreation industry.

Cathy Ritter, Director of the Colorado Tourism Office, shifted gears toward Colorado’s tourism economy and its relationship with outdoor recreation. With the “outdoors as our stage,” tourism triggered \$20.9 billion in direct spending

Modest Beginnings

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their telephone carrier to buy Google Play applications. Google Search, which is a Boulder project, uses location and weather data to produce alerts. The system sent flooding alerts to Front Range residents in September 2013.

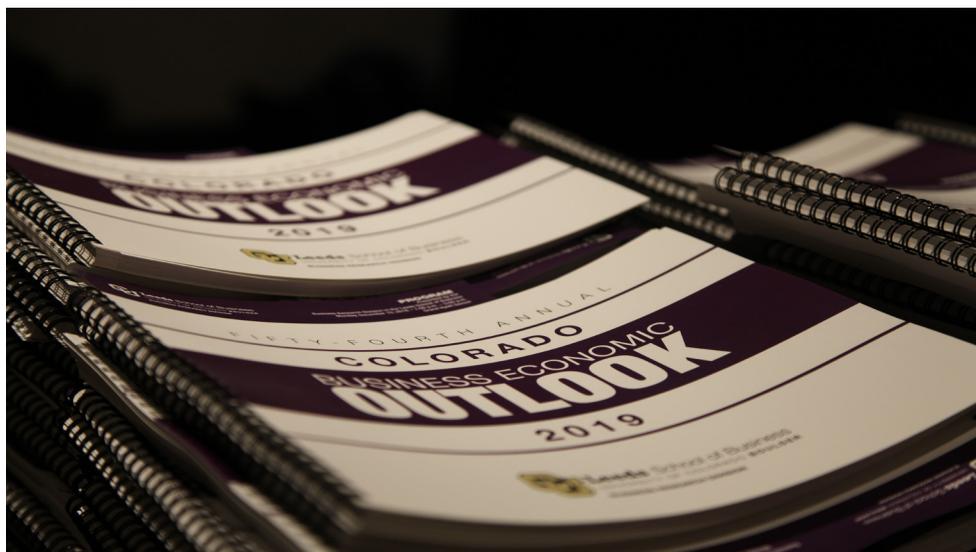
Google isn't the only tech firm experiencing local growth. Salesforce, Amazon, Facebook, and Zillow opened offices in or near Denver. Over the last five years, tech employment grew by 32%. Furthermore, the concentration of tech workers in Colorado is 31% higher than the national average.

Green notes that "technology is transforming every industry." From autonomous vehicles to contact lenses with circuit sensors, technology continues to reshape industries, even those that appear invulnerable to radical transformations. Razors, for example, "would seemingly be immune to software disruption." Companies like Dollar Shave Club and Harry's Razors, however, contributed to the drop in Gillette's market share as they launched online direct selling.

The growth and the changing economy cause problems. Many people are priced out of the local housing market, the growth puts strains on the transportation systems, and many people haven't benefited from the shifting economy. The technology itself drives progress but it raises a lot of difficult questions, such as the social impact of automation and the responsibilities of platforms for their content. Over time we'll figure these things out. It won't be a straight line but collectively we will work through them.

The Colorado software industry is thriving. The high quality of life is a big factor. Technology isn't moving into this area, it is transforming every industry. The foundations for this growth were laid long ago, often with very modest beginnings.

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Outdoor

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flowers, water in streams, or wildlife, for example. Value is created as a byproduct of their existence, and determining their influence on development is vital to the long-term success of this industry. In addition, external forces such as droughts, wildfires, and population growth must be considered by decision-makers.

A central theme of this breakout session was the concept of *coalescing*. The outdoor recreation industry will no longer be viewed as an isolated component of the Colorado economy—it is a central force that will influence, and be influenced, by many factors. As the once separate roles of sustainability, technology, tourism, and employee well-being come together, outdoor recreation leaders will be called upon to do more than simply increase the number of visitors.

Audience query centered around "high value traveler," or people who help enrich the economy and participate in the stewardship of Colorado. Instead of sending a message of "come one, come all," the Colorado Tourism Office wants to focus on the quality of visitors rather than the quantity. The concept of wellness

in relation to the outdoors also spurred discussion about tourism centered around improving one's health and employer promotion of outdoor time. 

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